INDIANA
Epidemiology
NEWSLETTER

Indiana State Department of Health

Epidemiology Resource Center
2 North Meridian Street, 3-D
Indianapolis, IN 46204
317/233-7416

August 2001
Vol. IX, No. 8

Influenza Vaccine for the 2001-2002 Season

The trivalent influenza vaccine components for the 2001-02 season will include:

- A/Moscow/10/99-like (H3N2)
- A/New Caledonia/20/99-like (H1N1), and
- B/Sichuan/379/99-like

These viruses will be used in manufacturing because of their growth properties and their representativeness of the currently circulating influenza A and B viruses.

Influenza Vaccine Supply and Production

Vaccine manufacturers are projecting 77.1 million doses of vaccine will be distributed this season. The officials from the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) stress that these are preliminary projections from the manufacturers and could change at any point as the season progresses. Two-thirds of the total flu vaccine supply should be distributed by mid-October, with the remainder being shipped in November and December. The amount of doses that will be available by December is greater than the amount of vaccine produced in 1999. Delays in distribution are still anticipated, but not as severe as last year.

Optimal time to vaccinate

Although the delay is not anticipated to be as significant as last year, influenza vaccine obtained early in the season should still be prioritized for those individuals who meet the definition of high risk and for those health professionals who put high-risk people at greater risk. This includes all office and professional staff that has contact with the high-risk population. Optimally, these people should be vaccinated in October and November. Vaccine should be offered to high-risk persons when they are seen for routine care or are hospitalized in September, if vaccine is available. (ACIP recommendations-MMWR 2001:50 (no. RR-4), MMWR 2001; 50:582-585.)

Table of Contents:

ACIP High Risk Target Groups

- Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma
- Persons aged ≥65 years:
- Residents of nursing homes and other chronic-care facilities that house persons of any age who have chronic medical conditions;
- Adults and children who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies, or immunosuppression) including immunosuppression caused by medications or by human immunodeficiency [HIV] virus);
- Children and teenagers (aged 6months -18 years) who are receiving long-term aspirin therapy and, therefore, might be at risk for developing Reye syndrome after influenza infection; and
- Women who will be in the second or third trimester of pregnancy during the influenza season.

Providers should offer vaccine to lower risk patients as vaccine becomes more available in November and December. Providers should continue to vaccinate their patients even after influenza activity has been detected in the community, as long as vaccine is available. In Indiana, in 15 out of the last 18 years, influenza has peaked after mid- January. Therefore, administering influenza vaccine in November and December should give adequate time for sufficient antibody development for maximum protection against influenza.

Travelers

The following travelers should consider receiving influenza vaccine at least 2 weeks before travel if they were NOT vaccinated during the most recent fall or winter:

- Anyone at high-risk for influenza-related complications;
- Those traveling to the tropics at any time of year;
- Those traveling to the Southern Hemisphere from April through September; and
- Those traveling with large, organized tourist groups at any time of the year.

Educational opportunities

There will be a satellite broadcast on influenza and pneumococcal vaccines, offered by the CDC, held at our headquarters, 2 N. Meridian from 12-noon -2:30pm in the 8th floor training room. All interested persons should register by calling, Shawn Richards @ 317-233-7740, or by e-mailing her at srichard@isdh.state.in.us.

Meningococcal Infection: Public Health Recommendations and New Reporting Requirements

Julia Butwin, MSN
ISDH Communicable Disease

Overview

Meningococcal infection is an acute bacterial disease caused by *Neisseria meningitidis*, and is characterized by sudden onset of fever, headache, nausea and often vomiting, stiff neck, and frequently a petechial rash. Delerium and coma often appear. The case fatality rate ranges between 5-15%. Up to 10% of United States residents may be colonized with *N. meningitidis* in the nasopharynx, yet have no symptoms of illness. A small minority of

persons who become colonized will progress to invasive disease, characterized by one or more clinical syndromes including bacteremia, sepsis, meningitis, or pneumonia.

The organism is spread by direct contact with an infected person's nose or throat secretions, such as by coughing close to a person's face, kissing a person on the mouth, or sharing eating utensils or beverage containers. The incubation period for the disease is 1 to 10 days, averaging 3-4 days. Since the incubation period is short, it is imperative that close contacts be identified as soon as soon as a case is suspected, since they are at increased risk for infection. Close contacts are defined as household members, day care contacts, and anyone directly exposed to the suspected case's oral secretions. Once identified, close contacts should be informed to watch for signs of illness and be treated prophylactically with of one of the following antibiotics: Rifamipin, Ciprofloxacin, or Ceftriaxone.

The diagnosis is confirmed by recovery of *N. meningitidis* from blood or cerebrospinal fluid (CSF). *N. meningitidis* is a gram-negative diplococcus with 13 serogroups (A, B, C, D, 29E, H, I, K, L, W-135, X, Y, and Z). Serogroups A, B, C, Y, and W-135 are most frequently associated with invasive disease. Since identification of the organism can take a few days, most health care providers will make local health departments aware of individuals presenting to the hospital with symptoms consistent with meningococcal disease or when gram- negative diplococci are identified in their blood or CSF. Identification of close contacts should begin when meningococcal disease is suspected. There is a safe and effective vaccine used for persons age 2 and over that protects against infection with serogroups A, C, Y, and W-135. Since the average incubation period for the disease is 3-4 days, the vaccine would not provide protection after exposure in a timely manner and is not used for contacts of acute cases. The current use of the vaccine includes protection of persons with functional or anatomic asplenia, those with terminal deficiencies, college students, and travelers to countries with a high number of cases of meningococcal disease.

Guidelines for Meningococcal Testing at the ISDH Laboratory

Jon Radosevic, M(ASCP), RM(AAM)
ISDH Disease Control Laboratory

Submission/Transport

A pure, freshly grown culture isolate of Neisseria meningitidis from a sterile site (generally blood or CSF) would be the most appropriate specimen for submission to the ISDH lab.

Safe transportation and good survival of isolates is best accomplished if they are submitted as freshly grown on a chocolate/TM type medium slant, or an equivalent commercial transport maintenance medium, and sealed properly in an ISDH 10A mailer or other approved mailing container. Also, agar pieces aseptically removed from an 18-24 hour culture plate to a medium slant or sterile tube may be used for transport.

Please keep in mind that these isolates begin to lyse and die if they are continually incubated or held at room temperature after 3 days. If you have further problems or questions regarding submitting Neisseria meningitidis isolates to us, please call the lab at (317) 233-8040.

Testing

Neisseria meningitidis isolates received in the laboratory are routinely identified and/or confirmed by standardized conventional biochemical testing. Also, penicillin sensitivity data is collected by the Etest method for each isolate. Serological grouping (serogrouping) is included for epidemiological/surveillance information and is reported back to the submitter and the ISDH communicable disease staff for evaluation.

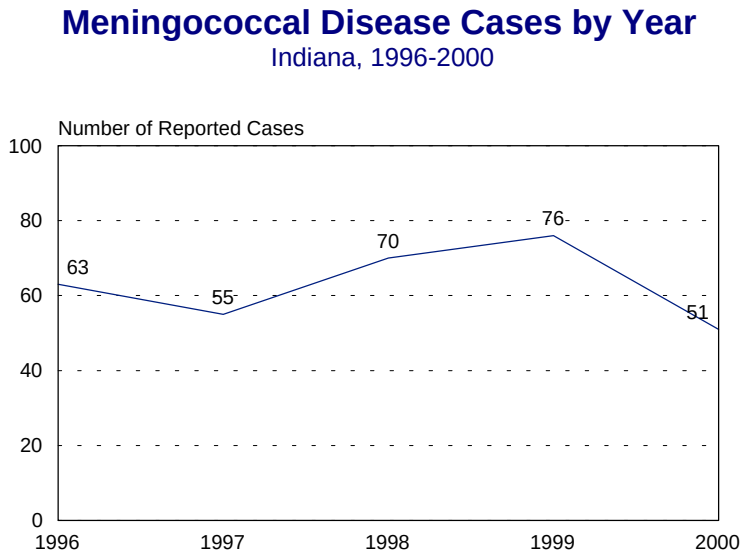
Additionally, molecular subtyping can be performed by pulsed-field gel electrophoresis (PFGE). Selected meningococcal isolates that may indicate an outbreak or cluster of cases may be examined in this manner to determine a level of genetic relatedness. Also Neisseria meningitidis isolates may be forwarded to the CDC for additional testing and evaluation. This type of testing is not routine and must meet approved guidelines via the ISDH/CDC.

In order to decrease the likelihood for transmission of *N. meningitidis,* individuals are encouraged to practice good health habits, such as not sharing drinks or eating utensils with other people.

Trends in Indiana

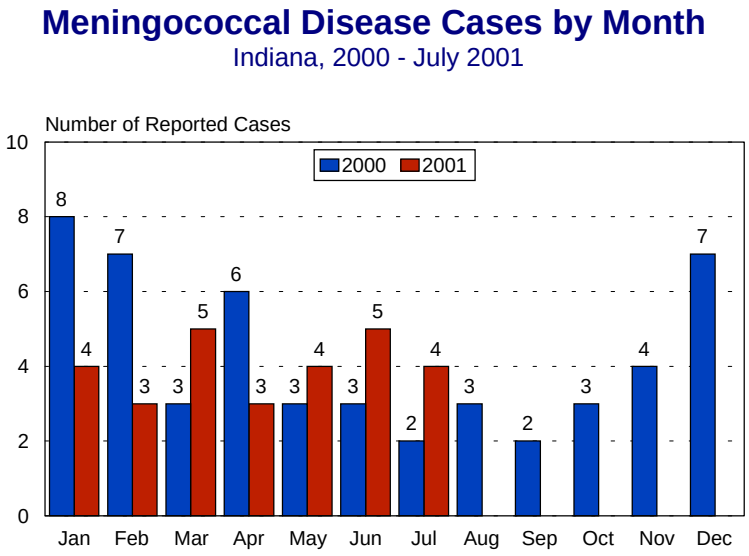
During the first 7 months of 2001, there have been 32 cases (28 confirmed) of meningococcal disease reported to ISDH, with 4 cases resulting in death. In 2000, there were 51 confirmed cases and 2 deaths, the lowest number of cases reported in the past 5 years (Figure 1).

Figure 1.



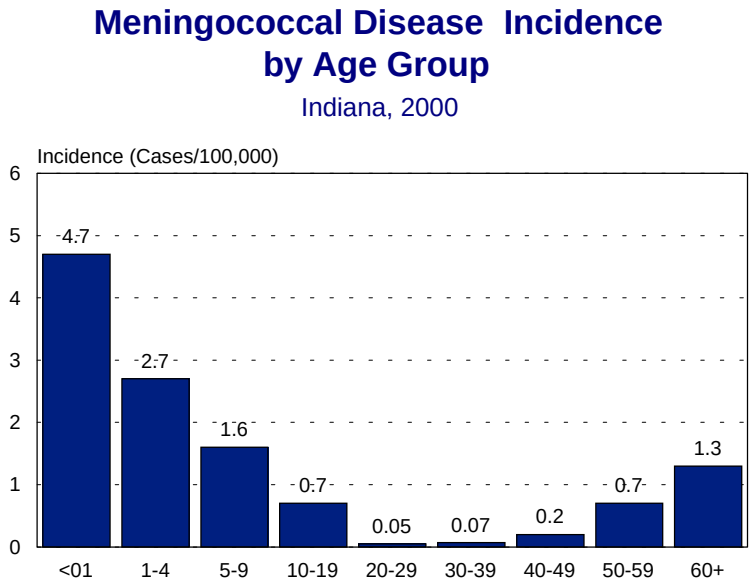
Meningococcal disease incidence usually peaks in late winter and early spring. The incidence of meningococcal disease in 2000 peaked during the winter months but the usual peak did not occur in 2001 (Figure 2).

Figure 2.



Infants, children, and teenagers were at higher risk for infection during 2000. Figure 3 shows the incidence of disease by age group.

Figure 3.



The Indiana Communicable Disease Reporting Rule for Physicians, Hospitals, and Laboratories, revised in October 2000, requires clinical laboratories to submit all positive *N. meningitidis* isolates collected from a normally sterile site. Prior to the rule revision, clinical laboratories had been voluntarily submitting isolates for serogrouping. Table 1 provides information about serogroups identified in Indiana.

Table 1.
Meningococcal Disease by Serotype
Indiana, 1997 – July 2001

Serogroup	1997	1998	1999	2000	2001
A	--	1 (1.4%)	--	--	--
B	18 (32.7%)	20 (28.6%)	11 (14.5%)	8 (15.7%)	7 (25%)
C	11 (20.0%)	14 (20.0%)	11 (14.5%)	12 (23.5%)	7 (25%)
Y	10 (18.2%)	15 (21.4%)	7 (9.2%)	12 (23.5%)	2 (7.1%)
W-135	--	1 (1.4%)	1 (1.3%)	--	--
Z	1 (1.8%)	--	--	--	1 (3.6%)
Ungroupable	4 (7.2%)	2 (2.7%)	1 (1.3%)	2 (3.9%)	3 (10.7%)
Unknown	11 (20.0%)	16 (22.9%)	39 (51.3%)	17 (33.3%)	8 (28.6%)
Total	55	70	76	51	28

College Student Immunization Recommendations

In 2000, the CDC published recommendations regarding the education of students about meningococcal disease and the meningococcal vaccine. College freshmen, especially those who live in dormitories or residence halls, are at a moderately increased risk for meningococcal disease compared to other persons their age.

The Advisory Committee on Immunization Practices (ACIP) recommends the following guidelines regarding the use of meningococcal vaccine for college students:

- Providers of medical care to incoming and current college freshman, especially those that plan to or currently live in dormitories and residence halls, should, during routine medical care, inform these students and their parents about meningococcal disease and the benefits of vaccination.
- Colleges should inform incoming and/or current freshmen, particularly those that plan to live or currently live in dormitories or residence halls, about meningococcal disease and the availability of a safe and effective vaccine.
- College freshmen that want to reduce their risk for meningococcal disease should be administered vaccine by a doctor's office or student health service.
- The risk for meningococcal disease among non-freshmen college students is similar to that for the general population. The vaccine is safe and efficacious and therefore can be provided to non-freshmen undergraduates who want to reduce their risk for meningococcal disease.
- Local and state public health agencies should provide colleges and health-care providers with information about meningococcal disease and the vaccine, as well as information regarding how to obtain vaccine.

College students who are at higher risk for meningococcal disease, such as those whose immune systems are suppressed or those who travel to countries where *N. meningitidis* is hyperendemic or epidemic should be vaccinated.

The guideline in its entirety can be found at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4907a2.htm

Recommendations for the Management of Airline Contacts

On June 15, 2001, the CDC published guidelines for the management of persons potentially exposed to meningococcus during air travel. These guidelines defines responsibilities of state or local health departments and the Centers for Disease Control and Prevention's (CDC) quarantine station for contact follow-up after a case of air-travel associated meningococcal disease is identified. To be considered a case of air-travel associated meningococcal disease, the following criteria are required:

- The case definition for meningococcal disease must be met
- Onset must be within 14 days of travel
- The flight must be of at least 8 hours duration (including ground time)

Because passengers sitting next to a person with meningococcal disease during a prolonged flight are at higher risk for developing the disease, antimicrobial chemoprophylaxis should be considered for those passengers seated in either seat next to an index case-patient. It is imperative for health care providers and health departments to assess all persons with meningococcal disease for recent travel, including flight information.

Once it has been determined that the person is a case of air-travel associated meningococcal disease, the following steps should occur:

- Inform the Indiana State Department of Health (ISDH) immediately of the case.
- ISDH will then contact the CDC quarantine station with jurisdiction over the case's port of entry to the United States.
- The CDC quarantine station will contact the airlines and obtain a passenger manifest, which includes name and seat number.
- The ISDH will then be given the passenger information from the CDC quarantine station and will contact each exposed traveler.

- If the exposed traveler is a foreign national visiting in the United States, the CDC quarantine station can assist in contacting exposed passengers.
- The quarantine station will contact the national health authority of the passenger's home country.

The guideline in its entirety can be found at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5023a2.htm

Outbreak Management

The CDC has published guidelines for the management of outbreaks of meningococcal disease caused by serogroups A, C, Y, and W-135. In some situations administration of chemoprophylaxis and or vaccine may be recommended. The guideline in its entirety can be found at http://www.cdc.gov/mmwr/preview/mmwrhtml/00046237.htm. The ISDH has recently published guidelines to follow when chemoprophylaxis or vaccine may be needed for large populations. This guidance will soon be available at http://www.in.gov.isdh.

Requirements of the Communicable Disease Reporting Rule

According to the rule, physicians and hospital administrators are required to report suspected cases of meningococcal infection to the local health department immediately. Laboratories are now required to submit all *Neiserria meningiditis* isolates when the organism resulted in invasive disease to the ISDH microbiology laboratory. The rule also lists the chemoprophylaxis to be used for contacts of invasive meningococcal cases. Knowledge of the serogroup provides valuable information in the identification of outbreaks and in decisions regarding control measures, especially since the vaccine does not provide protection against all serogroups.

References

American Academy of Pediatrics. Meningococcal Infections. Pickering LK, ed. *2000 Red Book: Report of the Committee on Infectious Diseases*. 25th ed. Elk Grove, IL: American Academy of Pediatrics; 2000 [pages396-401]

American Public Health Association. Chin, J., ed. *Control of Communicable Diseases Manual,* 17th Edition; 2000 [pages 340-345]

Centers for Disease Control and Prevention. Control and Prevention of Serogroup C Meningococcal Disease: Evaluation and Management of Suspected Outbreaks: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1997; 46 (RR-5).

Centers for Disease Control and Prevention. Prevention and Control of Meningococcal Disease.: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2000; 49 (RR-7).

Centers for Disease Control and Prevention. Meningococcal Disease and College Students: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2000; 49 (RR-7).
Centers for Disease Control and Prevention. Exposure to Patients with Meningococcal Disease on Aircraft--United States, 1999-2001. *MMWR* 2001; 50 (23); 485-9.

Health Insurance Portability and Accountability Act (HIPAA)

Chris Mickens, Director
ISDH External Information Services

The Health Insurance Portability and Accountability Act, H.R. 3103 (known previously as the Kennedy-Kassebaum bill) passed with nearly a unanimous vote of the 104th Congress on August 2, 1996, and was signed into law (P.L. 104-91) on August 21. This Legislation has many purposes, including:

- Improving the portability and continuity of health insurance coverage in the individual and group markets
- Combating fraud and abuse in health insurance and healthcare delivery
- Simplifying the administration of health care

Subtitle F of HIPAA, the Administrative Simplification section, is intended to reduce the cost burden of healthcare delivery through standardization and facilitate electronic transmission of administrative and financial transactions between healthcare trading partners. In general, Administrative Simplification mandates:

- Electronic Data Interchange (EDI) standards for nine types of transactions
- Unique health identifiers for individuals, employers, health plans and providers
- Standard code sets for diagnoses and procedures
- Security standard
- Privacy standard

What will be the impact of HIPAA on the healthcare industry?

The impacts of HIPAA will be widespread and complex. All health plans, provider organizations, clearinghouses, government programs and other healthcare commerce players, must understand the details of HIPAA and make required changes to their systems, business practices, and policies and procedures. Additionally, HIPAA sets new privacy and security regulations for the handling of sensitive information, electronic or paper, in all organizations.

HIPAA requirements are meant to encourage the healthcare industry to move patient information handling activities from manual to electronic systems in order to improve security, lower costs, and lower the error rate. Other benefits for the industry include major reduction in provider receivable cycle from 90-120 days to 30 days in many cases and payers will realize significant savings migrating from paper to electronic claims. In the long run, HIPAA will save the industry billions of dollars per year in labor, time, and material savings.

Organizations will have to assess what impact HIPAA will have and determine their own appropriate plan of action. The next steps the Indiana State Department of Health and special institutions have determined include:

- designating a privacy official
- providing additional HIPAA training for the workforce, especially for privacy and security regulations
- implementing policies and procedures to prevent intentional or accidental misuse of protected health information
- establishing sanctions for workplace violations
- implementing an internal complaint process
- overseeing mitigation to reduce/eliminate HIPAA noncompliance
- outlining whistleblower provisions
- indicating no waiver of rights

A complete “HIPAA Primer” can be found at www.hipaadvisory.com. A glossary of HIPAA terms can also be found at this site.

Conferences and Seminars

CDC offering Satellite Broadcast on influenza and pneumococcal vaccines

Place:

Indiana State Department of Health
2 N. Meridian Street
Indianapolis

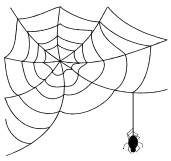
Time:

12-noon -2:30pm, 8th floor training room.

Registration:

All interested persons should register by calling:

Shawn Richards @ 317-233-7740,
or e-mail at srichard@isdh.state.in.us.



Wonderful Wide Web Sites

ISDH Data Reports Available

The ISDH Epidemiology Resource Center has the following data reports and the Indiana Epidemiology Newsletter available on the ISDH Web Page:

http://www.state.in.us/isdh/ (under Data and Statistics)

Indiana Cancer Incidence Report (1990, 95)

Indiana Cancer Mortality Report (1990-1994)

Indiana Health Behavior Risk Factors (1995-96, 97, 98)

Indiana Hospital Consumer Guide (1996)

Indiana Marriage Report (1995, 96, 97)

Indiana Mortality Report (1995, 97, 98, 99)

Indiana Natality Report (1995, 96, 97)

Indiana Report of Diseases of Public Health Interest (1997, 98)

Other sites related to articles in this newsletter:

The following site allows access to the web page for any state health department in the United States:

http://www.polsci.wvu.edu/grad/klase/STATEHEALTH/sthlth.html

HIV Disease Summary

Information as of August 31, 2001 (population 5,752,151).

HIV - without AIDS to date:

364	New cases from August 2000 thru July 2001	12-month incidence:	6.23 cases/100,000
3,391	Total HIV-positive, without AIDS on July 31, 2001[1]	Point prevalence:	58.07 cases/100,000[1]

AIDS cases to date:

347	New AIDS cases from August 2000 thru July 2001	12-month incidence:	5.94 cases/100,000
2,788	Total AIDS cases on July 31, 2001[1]	Point prevalence:	47.74 cases/100,000[1]
6,273	Total AIDS cases, cumulative (alive and dead)		

[1] Counting only cases alive in August 2001

REPORTED CASES of selected notifiable diseases

Disease	Cases Reported in July 2001 *MMWR* Weeks 27-30		Cumulative Cases Reported through January-July 2001 *MMWR* Weeks –1-30	
	2000	2001	2000	2001
Campylobacteriosis	77	65	259	202
Chlamydia	948	764	7,524	8,553
*E. co*li 0157:H7	19	8	46	38
Hepatitis A	3	8	30	52
Hepatitis B	4	5	30	26
Invasive Drug Resistant *S. pneumoniae* (DRSP)	14	10	141	135
Gonorrhea	422	335	3,418	3,498
Legionellosis	6	2	22	12
Lyme Disease	5	1	11	3
Measles	0	0	0	4
Meningoccal, invasive	6	3	31	26
Pertussis	11	7	38	27
Rocky Mountain Spotted Fever	1	0	1	2
Salmonellosis	41	74	291	268
Shigellosis	152	13	890	132
Syphilis (Primary and Secondary)	16	7	227	102
Tuberculosis	11	9	76	54
Animal Rabies	0	0	0	1 (bat)

For information on reporting of communicable diseases in Indiana, call the *ISDH Communicable Disease Division* at (317) 233-7665.

Indiana
Epidemiology
Newsletter

The *Indiana Epidemiology Newsletter* is published by the Indiana State Department of Health to provide epidemiologic information to Indiana health professionals and to the public health community.